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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/439,061	11/12/1999	ROBERT J. PROEBSTING	939A-350-1-2	1190

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EXAMINER --

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 06/04/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/439,061

Applicant(s)

PROEBSTING, ROBERT J.

Examiner

BRIAN P. YENKE

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2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Response (22 March 2004).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The applicant has overcome the previous rejection by showing that an earlier filing date than the applied art, IEEE International Workshop on Memory Technology, Design and Testing, published 19 Dec 96. However, it is noted by the examiner that there are numerous inventors/assignees acknowledged for their contribution to the article (page 33 of article, last paragraph). Thus, the examiner requests the applicant to clarify inventorship with respect to the article and the portion(s)/part(s) invented solely by the applicant. Also, the examiner requests the applicant to clarify the possession/availability of the non-published article with respect to different inventors/authors/assignees, since the article was published in Dec 96, although it was referenced in US Provisional Application 60022729 (29 July 96, where the hardcopy was inadvertently not included (per applicant's remarks)), and included in US Provisional Application 60023955 (09 August 96). The examiner relied on the article to show that neighboring arrays which shared sense amplifiers were not permitted to be open at the same time. The examiner requests the applicant to explain/clarify this aspect/portion of the article and whether this concept was known/conventional or invented solely by the applicant.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-23 rejected under 35 U.S.C. 102(e) as being anticipated by Senso et al., US 5,481,306.

In considering claim 20,

*a) the claimed segmenting a plurality of pixels representing one horizontal line of an image display panel into a plurality of pixel groups* is met by the display circuit (Fig 6) which receives a hi-vision signal via A/D converter 1, which is processed via vertical dividing portion 2, and scanning line converting portion 3 (Fig 3). The hi-vision signal is adjusted to be display to be displayed onto a ordinary television 15 (Fig 6).

*b) the claimed storing data representing each of said plurality of pixel groups, respectively in a row of plurality of non-adjoining arrays in the memory section* is met by horizontal dividing portion 4 where the memory row (Fig 3) are non-adjoining for each vertical filter.

In considering claims 21-23,

*a) the claimed defining tiles...*is met where display 15 has tiles 11-14, 21-24 and 31-34 (Fig 2c)

*b) the claimed storing data...*is met where tiles 11-14, 21-24 and 31-34 are each stored in memory array which are non-adjoining (i.e. separated)(Fig 3).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senso et al., US 5,481,306.

In considering claims 24-25,

Senso does not explicitly disclose dividing the display panels into a 1<sup>st</sup> and 2<sup>nd</sup> half. Senso does disclose that the display 15 is divided into sections/tiles which includes 3 rows and columns. Senso also discloses that this arrangement is for the conversion of a Hi-vision system signal into an NTSC signal, where the system could also be modified to display/convert other types of signals (col 9, line 27-31).

Regarding the division of the display panel, since Senso discloses the division of the display into 3 rows/4 columns, utilizing 3 sets of memory 4 (Fig 3), it would have been obvious to one of ordinary skill in the art at the time of the invention to divide the display into halves or multiple variations, based upon the memories available/design choice (i.e. 2 memories/2 halves).

Regarding the storage of pixels into an array (i.e. 1<sup>st</sup> half in odd numbered arrays), as stated above, the division of the display is an obvious design choice based upon available memory, therefore, in the event the display was divided into halves, the

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top or bottom half could be stored in the odd (memory 1) or even numbered (memory 2), thus the result of storage from one portion into either memory is a choice of design, since no unexpected results are derived in the design.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-9871. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (703)305-4795.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

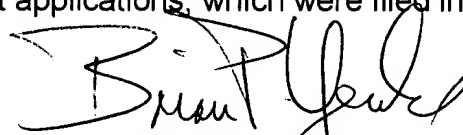
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General information brochures can also be obtained in person from the Patent Search Room located in Crystal Plaza 3, Room 1A03, 2021 South Clark Place, Arlington, VA 22202.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and

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applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS). PAIR (<http://pair.uspto.gov>) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.



BRIAN P. YENKE  
Primary Examiner  
Art Unit 2614



B.P.Y.

27 May 2004